

DocumentID NONCD0002863

Site Name BABY DIAPER SERVICE

DocumentType Site Assessment Rpt (SAR)

RptSegment 1

DocDate 8/31/2007

DocRcvd 9/5/2007

Box SF1225

AccessLevel PUBLIC

Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

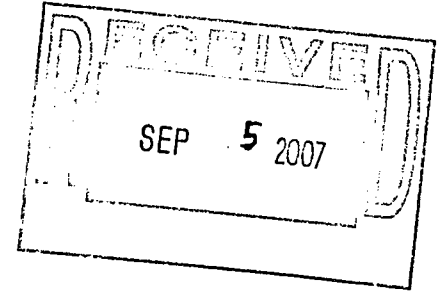
DocCat FACILITY





August 31, 2007

Baby Diaper Service, Inc  
810 McNair Court  
High Point, North Carolina 27265



Attention: Mr. Marshall Morgan

Reference: RESULTS OF PHASE II ASSESSMENT SERVICES

Baby Diaper Service Property  
1819 Spring Garden Street  
Greensboro, North Carolina  
S&ME Project No. 1584-07-045

Dear Mr. Morgan:

This letter summarizes the groundwater sampling information that S&ME collected at the referenced site. The groundwater sampling activities were authorized by Mr. Marshall Morgan and were completed in general accordance with S&ME proposal 1584-07-P102. The purpose of the sampling activities was to further define the extent of contaminants in the areas of sampling locations G-4 and G-6 identified during previous assessment activities on the property.

## **PROJECT UNDERSTANDING**

Mr. Brad Deaton requested that S&ME provide services related to a proposed development of the property located at 1819 Spring Garden Street in Greensboro, North Carolina. The proposed development will consist of commercial and residential structures (two and three-stories tall) with parking and drive areas. Planned development will require the demolition of the existing Baby Diaper service structures at the site.

Wayne Watterson met with Mr. Deaton, Mr. Richard Montana with Allied Commercial Realty, and Mr. Alan Sharpe with Sterling Development Company on June 5, 2007, to discuss the information in reports related to the property, and to discuss potential development at the site. During the meeting, Mr. Watterson stated that the reports reviewed by S&ME address only a former gasoline underground storage tank (UST) at the site. Based on a brief site visit performed by Mr. Watterson on June 5, 2007, other environmental issues may be present at the site. Mr. Montana stated that he would obtain a copy of the Phase I Environmental Site Assessment (ESA) for the site that was completed for the current owner. Mr. Montana provided S&ME with a copy of the Phase I ESA (Griffith Enterprises, Inc., September 18, 2006) on June 5, 2007.

The Phase I ESA documented the presence of several recognized environmental conditions at the site, including the former gasoline UST. Other recognized environmental conditions were identified based on observed evidence of chemical use at the site and on former site occupants. Former occupants at 1819 Spring Garden Street were documented in the Phase I ESA as follows: Sedgefield Mills (1947), Amalgamated Chemical Company (1955 to 1957) and Baby Diaper Service (1963 to 2001).

Sampling activities were performed on July 10, 2007, to assess whether historical industrial activities at the site may have caused contamination to the soil and groundwater. Results of Sampling Services were reported to Mr. Deaton in a letter from S&ME dated August 24, 2007.

In a meeting dated August 6, 2007, the laboratory results of S&ME's assessment for Deaton Development Consultants were discussed. Attendees at the meeting included Mr. Brad Deaton of Deaton Development Consultants (by teleconference), Mr. Alan Sharpe with Sterling Development Company, Mr. Richard Montana with Alliance Commercial Properties, Mr. Marshall Morgan, and Wayne Watterson and Jim Dees of S&ME. The meeting was held at Mr. Montana's office. During the meeting, Mr. Deaton, Mr. Sharpe and Mr. Morgan agreed to conduct additional assessment at the site in the areas near sampling points G-4 and G-6. The purpose of the agreed upon additional assessment would be to further define the extent of contaminants in these areas of the site. Mr. Deaton acknowledged that S&ME could provide these services to Mr. Morgan without a conflict of interest. Mr. Morgan subsequently requested that S&ME provide him with a proposal for follow-up Phase II sampling services at the site.

## **FIELD ACTIVITIES**

S&ME and subcontractor Probe Technology, Inc., mobilized to the site on August 14, 2007, to collect groundwater samples at selected locations related to previous sample locations G-4 and G-6.

Three macrocore soil probes (A, B, and C) were performed to depths ranging from 11 feet to 12 feet below finished floor elevation with a Geoprobe®. The soil probes were performed at locations north, west and south of previous sample location G-4, as shown on Figure 1. A temporary, PVC standpipe was placed into each soil probe location. Groundwater samples were collected from each temporary standpipe by hand using a disposable Teflon bailer. Each groundwater sample was placed into a plastic container. S&ME performed pH measurements for each sample using an electronic pH probe. The results of the field measurements for pH are as follows:

A-	12.86
B-	13.10
C-	9.65

S&ME placed a groundwater sample obtained from each standpipe into laboratory-prepared containers. After the groundwater samples were collected, the standpipe was removed from each probe location and the open holes were filled with bentonite.

Three groundwater sample locations (P-1, P-2 and P-3) were selected at locations north, west and south of previous sample location G-6, as shown on Figure 1. A discreet sampling device was advanced at each location with a Geoprobe®. The sampling device consists of a screened casing that is 4 feet in length. The screened casing is covered with an outer sheath as the device is advanced to the desired sampling depth. The outer sheath is retracted to expose the screened casing to the saturated zone when the desired sampling depth is encountered.

The screened interval was advanced to a depth ranging from 8 feet to 12 feet below finished floor elevation at sample location P-1; however, the sampling device was dry when the screened interval was exposed. The screened interval was advanced to a depth ranging from 11 feet to 15 feet below finished floor elevation at sample location P-2 and to a depth ranging from 12 feet to 16 feet below finished floor elevation at sample location P-3. The depth to groundwater was initially measured at an approximate depth of 9.5 feet below finished floor elevation with an electronic water probe at sample location P-3. The sampling device at sample location P-1 was removed due to the absence of groundwater in the screened section. The screened interval was then advanced to a depth ranging from 12 feet to 16 feet below finished floor elevation at sample location P-1.

Dedicated, disposable polyethylene tubing with a check valve was placed into each sampling device by hand to recover groundwater samples from the sampling device. The water samples were transferred into laboratory-prepared containers and placed into a cooler with ice for delivery to the analytical laboratory.

After the groundwater samples were collected, the depth to groundwater was measured at an approximate depth of 8.5 feet below finished floor elevation at sample location P-3. Each sampling device was removed and the open holes were filled with bentonite.

## **LABORATORY ANALYSIS**

Three groundwater samples (A, B, C) obtained from the temporary standpipes installed near previous sample location G-4 were submitted for a pH measurement in the laboratory. The results of the laboratory measurements for pH are as follows:

A-	11.91
B-	12.06
C-	7.50

The three groundwater samples obtained from the sampling device at locations near previous sample location G-6 (P-1, P-2, P-3) were analyzed in the laboratory for volatile and semivolatile organic compounds EPA methods 6210D and 625. The results of the laboratory analyses are summarized in Table 1.

## DISCUSSION

As shown in Table 1, groundwater samples P-1, P-2 and P-3 selected for laboratory analyses each contained detectable concentrations of target compounds at concentrations that exceed North Carolina groundwater quality standards (NCAC 2L). The extent of the identified compounds was not determined by this assessment.

Based on topography, groundwater flow at the subject site is generally expected to be toward the north. The reported concentrations of petroleum compounds identified in samples P-1, P-2, P-3 and G-6 suggest that the removed gasoline UST west of P-3 may be a partial source of the identified petroleum compounds. However, the reported concentrations at G-6 are significantly higher than at P-1, P-2 and P-3; which suggests an alternate source. Given the assumed northerly groundwater flow direction and the relatively low petroleum concentrations reported in P-1 (south of G-6), a source area may be located near G-6. Also, a separate unknown source area could be located east of G-6. No groundwater samples have been collected on the subject property east of G-6 to assess groundwater quality because of access limitations. Mr. Morgan stated that Time Warner Cable removed a UST formerly located near the fence line in the general vicinity of G-6.

S&ME reviewed the regulatory file for an underground storage tank (UST) that was removed from the Time Warner Cable property at the North Carolina Department of Environment and Natural Resources (NCDENR) Winston-Salem regional office. The file indicates that a gasoline UST was removed on the Time Warner Cable property (formerly Cablevision of Greensboro) in 1991. According to information in the file, the UST was located southeast of G-6. A Notice of No Further Action was issued for the UST removal; however, a note in the file indicated that additional samples were needed. No information for a UST immediately east of G-6 was identified in the regulatory file.

S&ME reviewed the file for the release at the Fordham's site northwest of the property at the Guilford County Department of Public Health. The most recent groundwater data included in the regulatory file was from 1994. The extent of chlorinated compounds is not defined to the southeast (toward the subject property); however, given the calculated groundwater flow (to the north) and the reported concentrations, the release at Fordham's does not appear to be a significant source of chlorinated compounds at the subject property.

As shown above, the laboratory measurements for pH for groundwater samples A and B exceed the North Carolina groundwater quality standard range of 6.5 to 8.5. The extent of the pH exceeding the groundwater quality standard is defined to the north by sample location C. Source identification was beyond the scope of work included in this assessment.

## LIMITATIONS

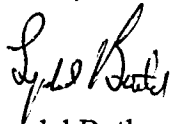
The scope of work summarized herein was not designed to be a comprehensive environmental assessment of the subject property. Contaminants may be present at other locations on the property.

## SOLE USE STATEMENT

All materials and information used for this project were obtained by S&ME. This report is provided for the sole use of Baby Diaper Service for this project. Use of this report by any parties other than Baby Diaper Service will be at such party's sole risk. S&ME disclaims liability for any use of or reliance on this report by third parties.

Thank you for allowing S&ME to assist you with this project. If you have any questions, please call at your convenience.

Sincerely,  
S&ME, Inc.



Lyndal Butler  
Environmental Scientist



Wayne H. Watterson, P.E.  
Senior Engineer

### Attachments

Table 1  
Figure 1  
Laboratory report

**Table 1**  
**Summary of Groundwater Data**  
**1819 Spring Garden Street**  
**Greensboro, North Carolina**  
**S&ME Project No. 1584-07-045**

Sample Location		P-1	P-2	P-3	2L Standard
Method	Analyte	[Concentration (ug/l)]			
<b>6210D</b>					
	Benzene	<25	226	924	1
	Trichloroethene	872	707	840	2.8
	Toluene	<25	1960	688	1000
	Ethylbenzene	470	1920	1150	550
	Naphthalene	258	569	268	21
	1,3,5-Trimethylbenzene	<25	514	284	350
	1,2,4-Trimethylbenzene	<25	2350	973	350
	Xylenes(total)	27	6740	1710	530
	I-propylbenzene	92.5	136	84	NS
	N-Propylbenzene	102	346	194	70
	cis-1,2-Dichloroethene	<25	276	45.5	70
<b>625 BN</b>					
	Naphthalene	153	349	336	21
	2-methylnaphthalene	43	127	152	14

2L Standard - North Carolina Groundwater Quality Standard, NCAC 2L .0202

ug/l - micrograms per liter

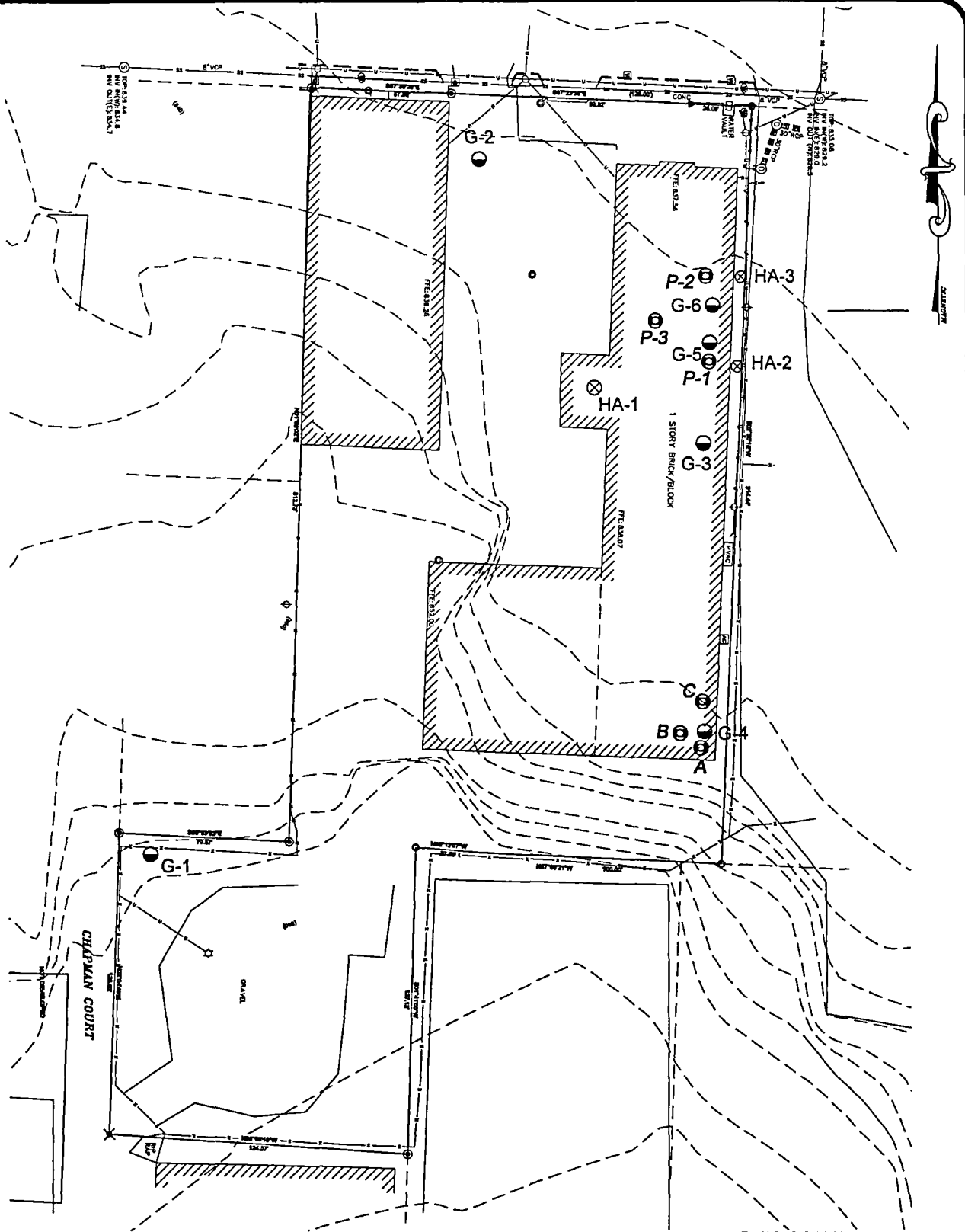
NS - no 2L Standard

Notes: **Yellow-highlighted cells represent NCAC 2L exceedances**

**Blue-highlighted cells represent detected concentrations below NCAC 2L standard**

**Samples collected on August 14, 2007**

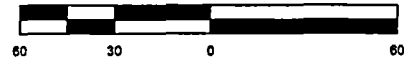




# KEY

- - APPROXIMATE GEOPROBE BORING LOCATION (JULY 2007)
- ⊗ - APPROXIMATE HAND AUGER BORING LOCATION (JULY 2007)
- ⊗ - APPROXIMATE GROUNDWATER SAMPLE LOCATION (AUGUST 14, 2007)

# GRAPHIC SCALE



SCALE: 1" = 60'

SCALE:	AS SHOWN
DATE:	AUGUST 2007
DRAWN BY:	RDM
PROJECT NO:	1584-07-045



**SAMPLE LOCATION DRAWING**  
BABY DIAPER SERVICE  
GREENSBORO, NORTH CAROLINA

FIGURE NO.

1



# Research & Analytical Laboratories, Inc.

Analytical/Process Consultations



## Chemical Analysis for Selected Parameters and Water Samples Identified as Baby Diaper Service (A S & ME Project #1584-07-045, collected 14 August 2007)

I. Volatile Organics	Quantitation	P-1	P-2	P-3
EPA Method 6210 D	Limit			
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1,1-Dichloroethane	0.0005	BQL	BQL	BQL
2,2-Dichloropropane	0.0005	BQL	BQL	BQL
Chloroform	0.0005	BQL	BQL	BQL
1,1,1-Trichloroethane	0.0005	BQL	BQL	BQL
1,1-Dichloropropene	0.0005	BQL	BQL	BQL
Carbon Tetrachloride	0.0005	BQL	BQL	BQL
Benzene	0.0005	BQL	0.226	0.924
1,2-Dichloroethane	0.0005	BQL	BQL	BQL
Trichloroethene	0.0005	0.872	0.707	0.840
1,2-Dichloropropane	0.0005	BQL	BQL	BQL
Dibromomethane	0.0005	BQL	BQL	BQL
Toluene	0.0005	BQL	1.96	0.688
1,1,2-Trichloroethane	0.0005	BQL	BQL	BQL
1,3-Dichloropropane	0.0005	BQL	BQL	BQL
Tetrachloroethene	0.0005	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.0005	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.0005	BQL	BQL	BQL
1,2,3-Trichloropropane	0.0005	BQL	BQL	BQL
Hexachlorobutadiene	0.0005	BQL	BQL	BQL
Bromobenzene	0.0005	BQL	BQL	BQL
Ethylbenzene	0.0005	0.470	1.92	1.15
Styrene	0.0005	BQL	BQL	BQL
Bromoform	0.0005	BQL	BQL	BQL
p-Isopropyltoluene	0.0005	BQL	BQL	BQL
N-Butylbenzene	0.0005	BQL	BQL	BQL
Naphthalene	0.0005	0.258	0.569	0.268
1,3,5-Trimethylbenzene	0.0005	BQL	0.514	0.284
1,2,4-Trimethylbenzene	0.0005	BQL	2.35	0.973
1,2,4-Trichlorobenzene	0.0005	BQL	BQL	BQL
1,2,3-Trichlorobenzene	0.0005	BQL	BQL	BQL
Chlorobenzene	0.0005	BQL	BQL	BQL
2-Chlorotoluene	0.0005	BQL	BQL	BQL
4-Chlorotoluene	0.0005	BQL	BQL	BQL
Tert-Butylbenzene	0.0005	BQL	BQL	BQL
Sec-Butylbenzene	0.0005	BQL	BQL	BQL
1,4-Dichlorobenzene	0.0005	BQL	BQL	BQL
1,2-Dichlorobenzene	0.0005	BQL	BQL	BQL
Total Xylenes	0.0005	0.0270	6.74	1.71
I-Propylbenzene	0.0005	0.0925	0.136	0.0840
N-Propylbenzene	0.0005	0.102	0.346	0.194
1,3-Dichlorobenzene	0.0005	BQL	BQL	BQL
Dibromochloromethane	0.0005	BQL	BQL	BQL
Dichlorodifluoromethane	0.0005	BQL	BQL	BQL
Chloromethane	0.0005	BQL	BQL	BQL
Vinyl Chloride	0.0005	BQL	BQL	BQL
Bromomethane	0.0005	BQL	BQL	BQL
Chloroethane	0.0005	BQL	BQL	BQL
Trichlorofluoromethane	0.0005	BQL	BQL	BQL
1,1-Dichloroethene	0.0005	BQL	BQL	BQL
Methylene Chloride	0.0005	BQL	BQL	BQL
Trans-1,2-Dichloroethene	0.0005	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.0005	BQL	0.276	0.0455
Bromodichloromethane	0.0005	BQL	BQL	BQL
Bromochloromethane	0.0005	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.0005	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.0005	BQL	BQL	BQL
Methyl-Tert-Butyl ether (MTBE)	0.005	BQL	BQL	BQL
Isopropyl ether (IPE)	0.005	BQL	BQL	BQL
Dilution Factor		50	50	50
Sample Number		596339	596340	596341
Sample Date		08/14/07	08/14/07	08/14/07
Sample Time (hrs)		1244	1255	1122

BQL = Below Quantitation Limits

mg/L = milligrams per Liter = parts per million (ppm)



# RESEARCH & ANALYTICAL LABORATORIES, Inc.

Analytical/Process Consultations



## Chemical Analysis for Selected Parameters and Water Samples Identified as Baby Diaper Service (A S & ME Project #1584-07-045, collected 14 August 2007)

II. Semi-Volatile Organics	Quantitation	P-1	P-2	P-3
EPA Method 625 BN	Limit			
Parameter	(mg/L)	(mg/L)	(mg/L)	(mg/L)
4-Chloro-3-methylphenol	0.010	BQL	BQL	BQL
2-Chlorophenol	0.010	BQL	BQL	BQL
2,4-Dichlorophenol	0.010	BQL	BQL	BQL
2,4-Dimethylphenol	0.010	BQL	BQL	BQL
2,4-Dinitrophenol	0.050	BQL	BQL	BQL
2-Methyl-4,6-dinitrophenol	0.050	BQL	BQL	BQL
2-Nitrophenol	0.010	BQL	BQL	BQL
4-Nitrophenol	0.050	BQL	BQL	BQL
Pentachlorophenol	0.050	BQL	BQL	BQL
Phenol	0.010	BQL	BQL	BQL
2,4,6-Trichlorophenol	0.010	BQL	BQL	BQL
Acenaphthene	0.010	BQL	BQL	BQL
Acenaphthylene	0.010	BQL	BQL	BQL
Anthracene	0.010	BQL	BQL	BQL
Benzidine	0.050	BQL	BQL	BQL
Benzo(a)anthracene	0.010	BQL	BQL	BQL
Benzo(a)pyrene	0.010	BQL	BQL	BQL
Benzo(b)fluoranthene	0.010	BQL	BQL	BQL
Benzo(ghi)perylene	0.010	BQL	BQL	BQL
Benzo(k)fluoranthene	0.010	BQL	BQL	BQL
Benzyl butyl phthalate	0.010	BQL	BQL	BQL
Bis(2-chloroethoxy)methane	0.010	BQL	BQL	BQL
Bis(2-chloroethyl)ether	0.010	BQL	BQL	BQL
Bis(2-chloroisopropyl)ether	0.010	BQL	BQL	BQL
Bis(2-ethyl-hexyl)phthalate	0.010	BQL	BQL	BQL
4-Bromophenyl phenyl ether	0.010	BQL	BQL	BQL
2-Chloronaphthalene	0.010	BQL	BQL	BQL
4-Chlorophenyl phenyl ether	0.010	BQL	BQL	BQL
Chrysene	0.010	BQL	BQL	BQL
Dibenzo(a,h)anthracene	0.010	BQL	BQL	BQL
1,2-Dichlorobenzene	0.010	BQL	BQL	BQL
1,3-Dichlorobenzene	0.010	BQL	BQL	BQL
1,4-Dichlorobenzene	0.010	BQL	BQL	BQL
3,3-Dichlorobenzidine	0.020	BQL	BQL	BQL
Diethyl phthalate	0.010	BQL	BQL	BQL
Dimethyl phthalate	0.010	BQL	BQL	BQL
Di-N-Butyl phthalate	0.010	BQL	BQL	BQL
2,4-Dinitrotoluene	0.010	BQL	BQL	BQL
2,6-Dinitrotoluene	0.010	BQL	BQL	BQL
Di-N-Octyl phthalate	0.010	BQL	BQL	BQL
1,2-Diphenylhydrazine	0.050	BQL	BQL	BQL
Fluoranthene	0.010	BQL	BQL	BQL
Fluorene	0.010	BQL	BQL	BQL
Hexachlorobenzene	0.010	BQL	BQL	BQL
Hexachlorobutadiene	0.010	BQL	BQL	BQL
Hexachlorocyclopentadiene	0.010	BQL	BQL	BQL
Hexachloroethane	0.010	BQL	BQL	BQL
Indeno(1,2,3-cd) pyrene	0.010	BQL	BQL	BQL
Isophorone	0.010	BQL	BQL	BQL
Naphthalene	0.010	0.153	0.349	0.336
Nitrobenzene	0.010	BQL	BQL	BQL
N-Nitrosodimethylamine	0.010	BQL	BQL	BQL
N-nitrosodi-n-propylamine	0.010	BQL	BQL	BQL
N-Nitrosodiphenylamine	0.010	BQL	BQL	BQL
Phenanthrene	0.010	BQL	BQL	BQL
Pyrene	0.010	BQL	BQL	BQL
1,2,4-Trichlorobenzene	0.010	BQL	BQL	BQL
2-Methylnaphthalene	0.010	0.043	0.127	0.152
Dilution Factor		1	1	1
Sample Number		596339	596340	596341
Sample Date		08/14/07	08/14/07	08/14/07
Sample Time (hrs)		1409	1310	1152

mg/L = milligrams per Liter = parts per million (ppm)

BQL = Below Quantitation Limits

BN = Base-Neutral Extractables



# RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



*Chemical Analysis for Selected Parameters and Water Samples Identified as Baby Diaper Service  
(A S & ME Project #1584-07-045, collected 14 August 2007)*

---

III. Miscellaneous <u>Parameters</u>	Quantitation Limit <u>(SU)</u>	A	B	C
		<u>(SU)</u>	<u>(SU)</u>	<u>(SU)</u>
pH (Lab)	N/A	11.91	12.06	7.50
Sample Number		596342	596343	596344
Sample Date		08/14/07	08/14/07	08/14/07
Sample Time (hrs)		1445	1450	1455

BQL = Below Quantitation Limits

mg/L = milligrams per Liter = parts per million (ppm)

N/A = Not Applicable



# RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical / Process Consultations  
Phone (336) 996-2841

## CHAIN OF CUSTODY RECORD

02995

Baby Diaper Service

Client: SCME, Inc.  
Address: Greensboro  
Quote #:

Project ID: 1584-07-040  
Contact: Wayne Watson  
Phone:   
Fax:

Date: 8-14-07  
Turnaround: Std  
Job Number:   
P.O. Number:

Report To: Same  
Invoice To:

					12				62/100	85	94						
P-1	8/14/07	12:44	A	X					X								596339
P	8/14/07	14:09	A							X							
P-2	8/14/07	12:55	A	X					X								340
	8/14/07	13:10	A							X							
P-3	8/14/07	11:22	A	X					X								341
	8/14/07	11:52	A							X							
A	8/14/07	14:45	A								X						342
B	8/14/07	14:50	A								X						343
C	8/14/07	14:55	A								X						344

Signed/Initials: 8/14/07 SSC 8/14/07 1700

NC ✓ SC  Other